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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/462,381	03/27/2000	GIUSEPPE DI SILVESTRO	022701-859	5018

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BURNS DOANE SWECKER & MATHIS L L P
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

WYROZEBSKI LEE, KATARZYNA I

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 12/17/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

A-5-10

Office Action Summary	Application No.	Applicant(s)	
	09/462,381	DI SILVESTRO ET AL.	
	Examiner	Art Unit	
	Katarzyna W. Lee	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-21 and 23-30 is/are rejected.
- 7) ☒ Claim(s) 6, 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

In the light of the applicant's amendment, mailed on October 11, 2001 the following rejections are stated.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 1-14, 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, term "possibly" in the definition of R₃, R₄ and R₅ renders claim indefinite, since it is not clear if the R groups actually contain unsaturation or not. In the same claim as well as in claim 17 in the definition of R₆ and R₇ the applicant utilizes term "substituted" as a description of alkyl hydrocarbon radical. Term "substituted" renders claim indefinite, since it is not clear as to what the substituents are.

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 17-21, 23, 25-29 rejected under 35 U.S.C. 102(b) as being anticipated by Ahroni (US 5,480,944).

The discussion of the disclosure of the prior art of Ahroni from previous office action mailed on June 11, 2001 is incorporated here by reference. The newly added claims reflect the originally submitted claims 1-5 and 7-9 therefore the prior art of Ahroni applies.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 24 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahroni (US 5,480,944) in view of Fisch (US 5,760,163).

The discussion of the disclosure of the prior art of Ahroni and Fish from paragraph 8 of the office action mailed on June 11, 2001 is incorporated here by reference, since the newly added claims reflect those from the original disclosure.

5. Claims 1-5, 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahroni (US 5,480,944) in view of Meyer (US 4,255,560).

The discussion of the disclosure of the prior art of Ahroni from previous office action mailed on June 11, 2001 is incorporated here by reference.

The difference between the present invention and the prior art of Ahroni is showing that the R groups of the monomeric component can be other than aromatic.

With respect to the above difference, the prior art of Meyer discloses composition for copolyamide, which comprises aliphatic monomer. The aliphatic monomer can be either diamine or dicarboxylic acid, which fits the formulas of the claim 1 of the present invention. More specific description of the aliphatic or cycloaliphatic dicarboxylic acids is discussed in col. 4 of the prior art of Meyer.

Use of only aromatic monomers to make polyamide will result in polymer that is tough and rigid. In order to impart flexibility to such polymer, it is well known in the art to add an aliphatic component.

In the light of the above disclosure it would have been obvious to one having ordinary skill in the art at the time of the instant invention to utilize aliphatic or cycloaliphatic monomer in order to obtain less rigid polymer and still obtain the claims invention.

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6. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahroni (US 5,480,944) in view of Meyer (US 4,255,560) as applied to claims 1-5 and 7-9 above, and further in view of Fish (US 5,760,163).

The discussion of the disclosure of the prior art of Ahroni and Meyer from paragraph 5 of this office action and the disclosure of the prior art of Fisch from paragraph 8 of the previous office action mailed on June 11, 2001 is incorporated here by reference.

In the amendment filed on October 11, 2001 the applicant raised the following arguments:

1) The prior art of Ahroni does not disclose the bifunctional monomer having formulae II-IV.

New amendment necessitated incorporation of prior art disclosing the use of monomers having formulae II-IV in order to make a copolyamide.

2) The ratio of multifunctional monomers to bifunctional and monofunctional monomers is 1.

3) The ratio of multifunctional to bifunctional monomers is 0.5 and the bifunctional to monofunctional is 1.

With respect to the above arguments 2 and 3 the amended claims call for molar ratio in a range of 0.01-5 for the ratio of polyfunctional monomers to the sum of bifunctional monomers and monofunctional monomers. The applicant's attorney disclosed in the arguments that this ratio is 1. Therefore it still falls in the claimed range.

4) The prior art of Fisch fails to teach the preparation of branched copolyamides and the monomers are different.

The prior art of Fisch was utilized to teach monomers of dependent claims, which can have more than one aromatic group. Therefore the prior art of Fisch supplies the required monomers.

5) The prior art of Fisch discloses reaction of bifunctional monomers with polyfunctional monomers.

With respect to the above argument, the claims of the present invention call for monomer of formula I to react with monomer of formulae II-IV with monofunctional monomers as optional component.

8) There is no reason to combine the prior art of Ahroni with the prior art of Fisch.

The prior art of Ahroni and Fish both make polyamides. Therefore it would have been obvious to combine these two disclosure, since they teach well known monomers, which can be used in polymerizing any polyamide.

Allowable Subject Matter

7. Claims 6 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna W. Lee whose telephone number is (703) 306-5875. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

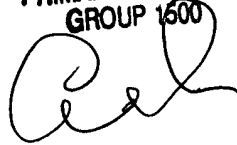
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

KIWL
December 5, 2001

EDWARD J. CAIN
PRIMARY EXAMINER
GROUP 1600

A handwritten signature in black ink, appearing to be 'EJC', written over the printed name and title.